



International Organization for Medical Physics



Women Group

Medical Physics Education in South Asia: Problems and Perspectives

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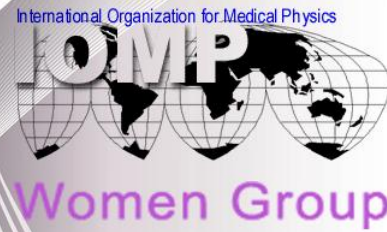
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Outline



- ❖ South Asian countries population with sex ratio, Cancer deaths/year and Cancer prevalence as proportion per 100,000 population
- ❖ Cancer statistics in South Asia
- ❖ Incidence and Mortality rate of Cancer

- ❖ Manpower & Studies related to cancer treatment
- ❖ Statistics of study in Science in SA region
- ❖ Societies of Medical Physics in South Asia Region
- ❖ MP education in SA region
- ❖ Female Participation in MP Education in SA region

- ❖ Reasons for less female students
- ❖ Solution



South Asia location



*This study covers South Asian region especially in Bangladesh, India, Nepal and Pakistan.

Bangladesh



Population	Sex ratio	Female %	Cancer deaths/year	Cancer prevalence as proportion per 100,000 population
159.86 M	102.44	49.398	103,300	2678

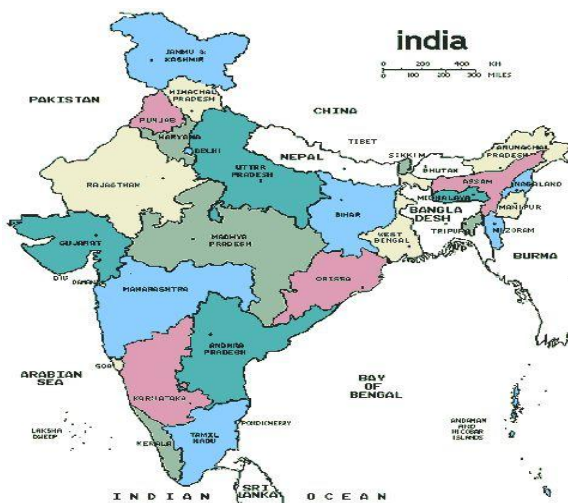
Nepal



Population	Sex ratio	Female %	Cancer deaths/year	Cancer prevalence as proportion per 100,000 population
28.4 M	93.82	51.594	20,000	3103



India



Population	Sex ratio	Female %	Cancer deaths /year	Cancer prevalence as proportion per 100,000 population
1276.2 M	107.07	48.294	633,455	2114

Pakistan



Population	Sex ratio	Female %	Cancer deaths /year	Cancer prevalence as proportion per 100,000 population
190.4 M	105.65	48.627	101,600	2740

Sri Lanka



Population	Sex ratio	Female %	Cancer deaths/year	Cancer prevalence as proportion per 100,000 population
208.6 M	95.56	91.135	17,000	3533

Myanmar



Population	Sex ratio	Female %	Cancer deaths/year	Cancer prevalence as proportion per 100,000 population
54.16M	94.11	105.81	24650	7500

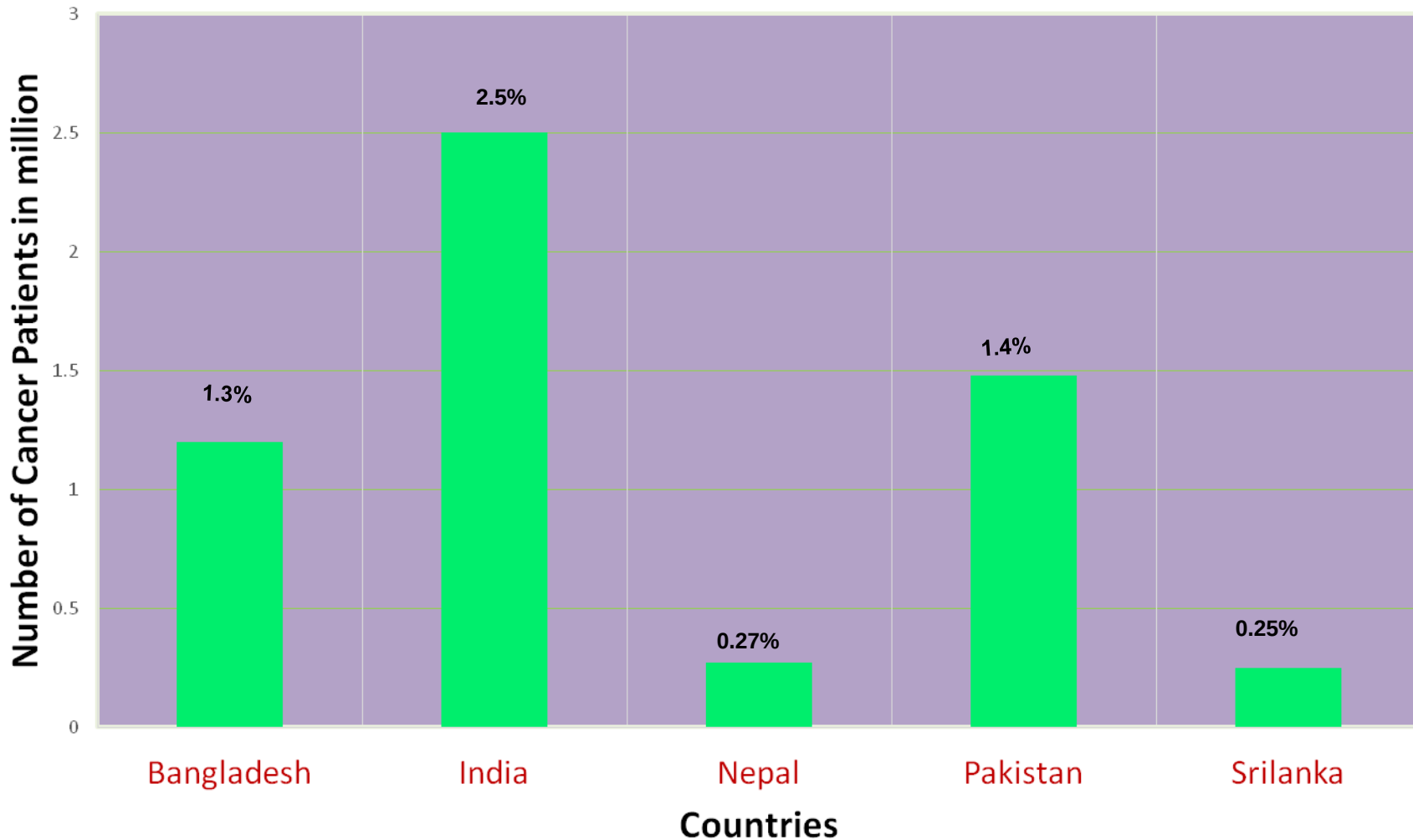
<http://statisticstimes.com/population/countries-by-sex-ratio.php>

http://journal.sajc.org/viewimage.asp?img=SouthAsianJCancer_2012_1_1_1_96489_b1.jpg

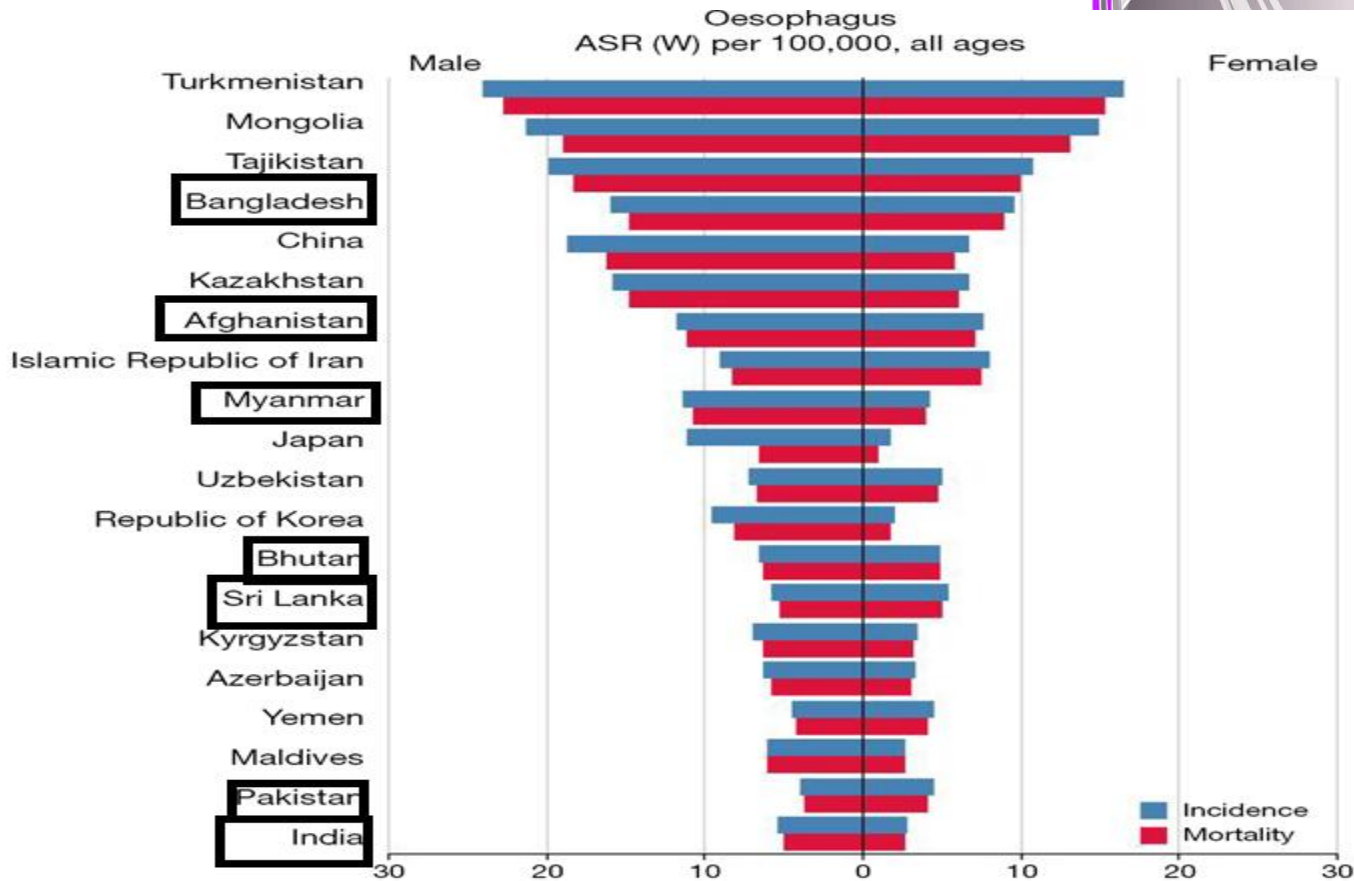


Cancer statistics in South Asia

Cancer Statistics in different countries

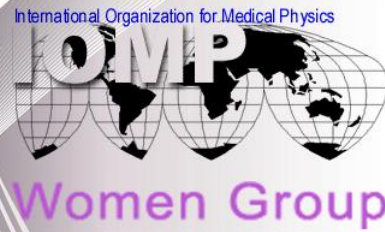


Incidence and Mortality rate of Cancer





Incidence and Mortality Rate of Cancer



Incidence Rates of Cancer:

Developing and
developing countries
economically developed
countries
nearly twice
as high as
in **economically developing**
countries in both males
and females

Mortality rates for all
cancers

Developing countries
are **only 21% higher in**
males and **only 2% higher**
in females than
developed countries



Disparities in Incidence and Mortality patterns

*Between
developed
and
developing
countries*



Regional differences in
the prevalence

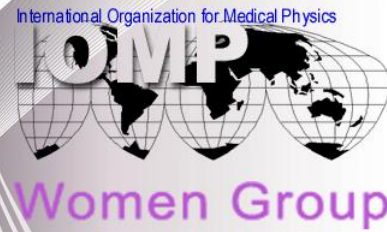
Distribution of the
major risk factors

Detection practices

Availability and use of
treatment services



Manpower & Studies related to cancer treatment



MANPOWER



- ❖ *Medical Physicist*
- ❖ *Radiation Oncologist*
- ❖ *Radiotherapy Technician*

RELATED STUDY



- ❖ *Medical Physics*
- ❖ *Medical Doctor (Oncologist)*
- ❖ *Diploma in RT*



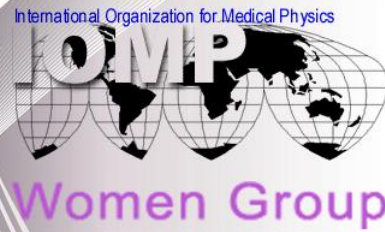
Statistics of study in Science in SA region



Country	% Male	% Female	
Afganistan	85.5	14.5	
Bangladesh	80.5	19.5	
		37.6 (Science)\$	62.4 (Others)
India	64.3	35.7	
		30.8 (Science)#	69.2 (Others)
Nepal	71.6	44.5	
Pakistan	86	14	
		16.9 (Science)@	83.1 (Others)
Sri Lanka	56.4	43.6	
Myanmar	49.3	50.7	
		85.5 (Science)	14.5 (Others)
Bhutan	53.0	47.0	



MP education in SA region



Bangladesh

- ❖ Gono Biswabidyalay
- ❖ University of Dhaka

India

- ❖ Anna University - Chennai
- ❖ Bharathiar University
- ❖ Bharathidasan University
- ❖ CMJ University
- ❖ Christian Medical College & Hospital
- ❖ D. Y. Patil Education Society Deemed University
- ❖ Jagadguru Sri Shivarathreeswara University
- ❖ Government Medical College, Thiruvananthapuram
- ❖ Integral University
- ❖ Kerala University of Health and Science

Pakistan

Pakistan Institute of Engineering & Applied Sciences

Nepal

N/A

Sri Lanka

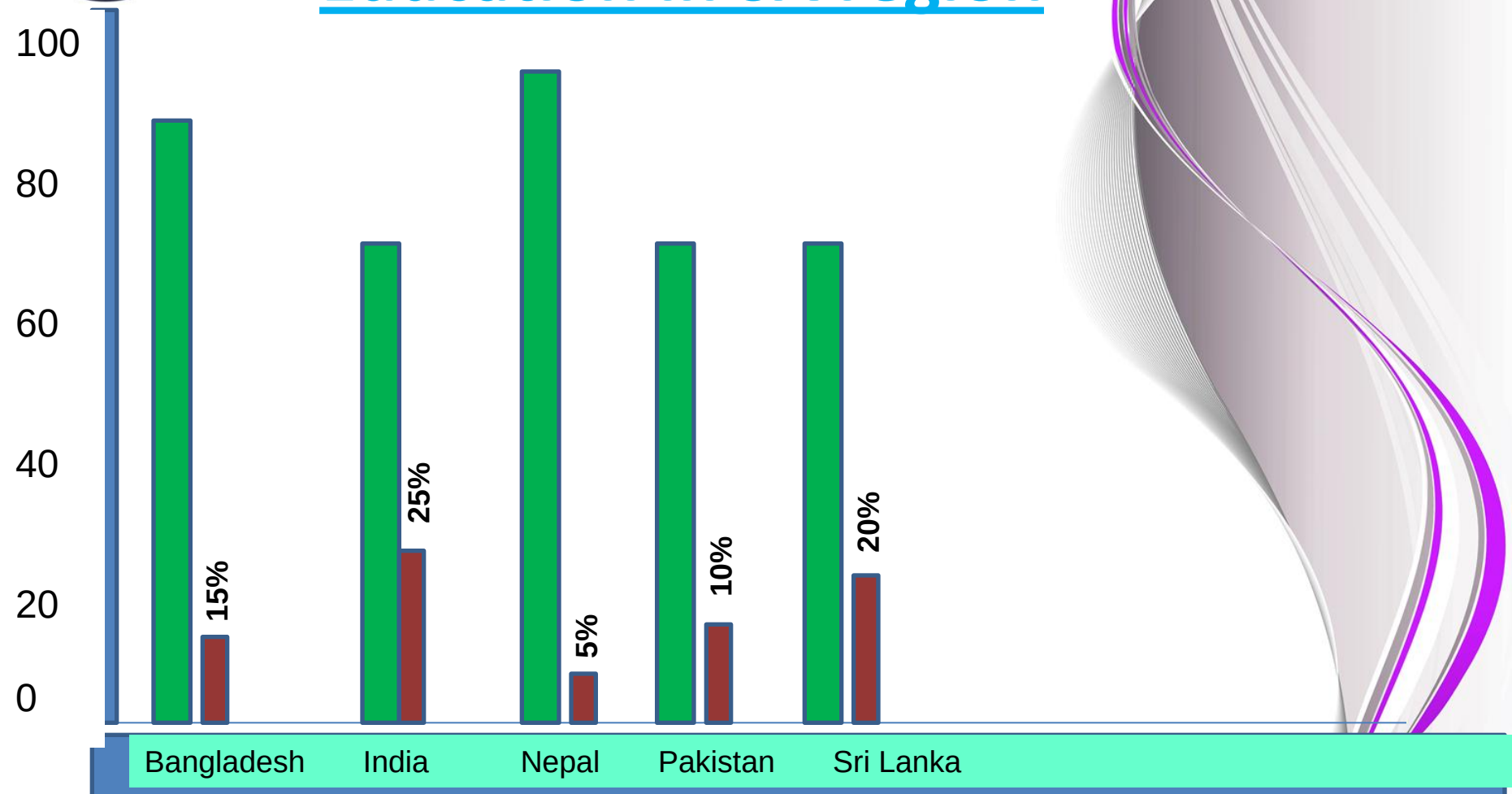
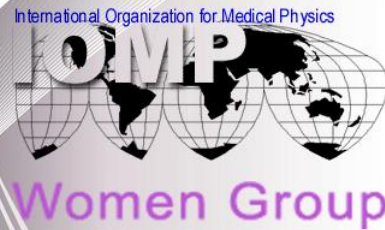
- ❖ University of Peradeniya
- ❖ University of Colombo

Bhutan, Myanmar, Afghanistan

N/A



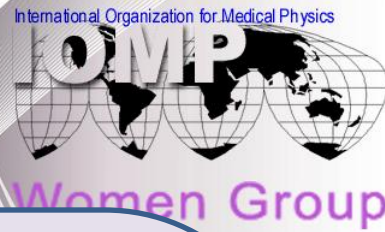
Female Participation in MP Education in SA region



Bhutan, Myanmar, Afghanistan has no MP EDUCATION



Reasons for Less Female Student in MP Education

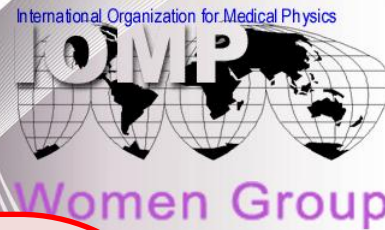


In a world only 30% of researchers are women low in science subjects compared to social subjects

- ✓ Challenge of balancing family life and career to a lack of childcare support and role models.
- ✓ Gender inequalities in women's academic careers : social class, caste, religion, ethnicity and language.
- ✓ Nurturing extended family roles. In developing countries females: house hold work and early marriage.
- ✓ Backgrounds and beliefs



Reasons for Less Female Student in MP Education cont.



- ✓ Although most governments have made female education mandatory up to class ten, it usually happens that after the 10th form parents are not interested in further education.
- ✓ Society's concern about occupational radiation hazards forces the females to discontinue with their careers.

**So it is obvious that
Females Never Succeed to a Career As Medical
Physicist Or In Higher Academic Posts.**



Solution



- ✓ Institutes can give exemption/ reduction in fees to female students.
- ✓ Female students in particular quota system.
- ✓ A public awareness is needed and through media it can be circulated.
- ✓ With encouragement, professional development
- ✓ Financial support



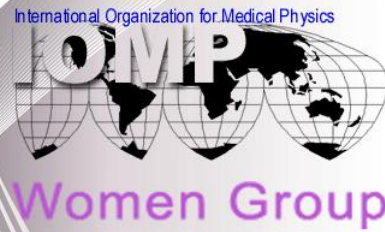
Activities of BMPS, AMPI, NAMP, etc





Activities of BMPS

Awareness for MP in Women College, School



Kumudini Government Girls College, 6 October, 2016



Dhaka Mohilla (women) Polytechnic Institute 11 April, 2016



Acknowledgement



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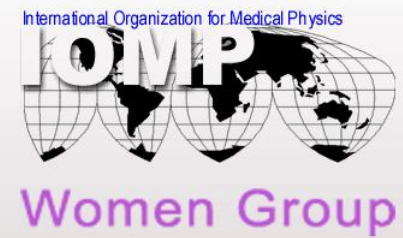
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THANK YOU!

